

1. (amended) A method of forming a doped A site deficient **[thin film]** manganate material on a substrate from corresponding precursor(s), comprising liquid delivery and flash vaporization thereof to yield a precursor vapor, and transporting the precursor vapor to a chemical vapor deposition reactor for chemical vapor deposition formation of the **[thin film]** manganate material on the substrate, said manganate material having a formula of  $\text{La}_x\text{M}_y\text{MnO}_3$ , where  $\text{M} = \text{Mg, Ca, Sr, or Ba}$ , and  $0.5 < (x+y) < 0.9$ .
2. (amended) **[A] The** method according to claim 1, wherein the precursor(s) comprise coordination compounds, or Lewis base complexes of **[the same, of]** metal(s) selected from the group consisting of lanthanum, magnesium, calcium, strontium, barium, and manganese.
3. (amended) **[A] The** method according to claim 1, wherein the precursor(s) include metal  $\beta$ -diketonate compounds, metal pivalate compounds, or Lewis base complexes thereof.
4. (amended) **[A] The** method according to claim 1, wherein the precursor(s) include metal fluorinated  $\beta$ -diketonate compounds, or Lewis base complexes thereof.
5. (amended) **[A] The** method according to claim 1, wherein the precursor(s) include metal pivalate Lewis base adducts.
6. (amended) **[A] The** method according to claim 1, wherein the **[thin film]** manganate material is selected from the group consisting of **[LaMgMnO, LaCaMnO, LaSrMnO, and LaBaMnO]**  $\text{La}_x\text{Mg}_y\text{MnO}_3$ ,  $\text{La}_x\text{Ca}_y\text{MnO}_3$ ,  $\text{La}_x\text{Sr}_y\text{MnO}_3$ ,  $\text{La}_x\text{Ba}_y\text{MnO}_3$ , wherein  $0.5 < (x+y) < 0.9$ .

7. (amended) [A] The method according to claim 1, wherein the precursor(s) are dissolved in a solvent and flash vaporized at a temperature of from about 100 °C to about 300 °C.
8. (amended) [A] The method according to claim 1, wherein the precursor vapor is transported to the chemical vapor deposition reactor in a carrier gas.
9. (amended) [A] The method according to claim 8, wherein the carrier gas is selected from the group consisting of argon, nitrogen, neon, helium and ammonia.
10. (amended) [A] The method according to claim 8, wherein the carrier gas is mixed with an oxidizing co-reactant gas in the chemical vapor deposition reactor or prior to transport to the chemical vapor deposition reactor.
11. (amended) [A] The method according to claim 1, wherein the chemical vapor deposition reactor contains a substrate article heated to a temperature in the range of from about 300 °C to about 1000 °C.
12. (amended) [A] The method according to claim 11, wherein the pressure of the precursor vapor in the chemical vapor deposition reactor is from about 0.1 to about 760 Torr.
13. (amended) [A] The method according to claim 1, wherein the chemical vapor deposition is plasma-assisted.
14. (amended) [A] The method according to claim 1, wherein the precursor(s) comprise a mixture of  $\beta$ -diketonate [ligand] compound selected from the group consisting of La(thd)<sub>3</sub>, Ca(thd)<sub>2</sub> and Mn(thd)<sub>3</sub>.

15. (amended) [A] The method according to claim 1[4], wherein the precursor(s) comprise a mixture of  $\beta$ -diketonate [ligand] compounds selected from the group consisting of  $\text{La}(\text{thd})_3$ ,  $\text{Sr}(\text{thd})_2$  and  $\text{Mn}(\text{thd})_3$ .
16. (amended) [A] The method according to claim 14, wherein said precursor(s) comprise a mixture of Lewis base adducts of metal  $\beta$ -diketonate precursors.
17. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $(\text{La} + \text{Ca}) < [1.0] \underline{0.9}$ .
18. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $0.5 < (\text{La} + \text{Ca}) < [0.99] \underline{0.9}$ .
19. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $(\text{La} + \text{Sr}) < [1.0] \underline{0.9}$ .
20. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $0.5 < (\text{La} + \text{Sr}) < [0.99] \underline{0.9}$ .
21. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $(\text{La} + \text{Ba}) < [0.99] \underline{0.9}$ .
22. (amended) [A] The method according to claim 1, wherein said [thin film] manganate material has A-site deficient stoichiometry, where  $0.5 < (\text{La} + \text{Ba}) < [0.99] \underline{0.9}$ .

Please add the following new claim: